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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/696,251 | 10/29/2003 | G.B. Kirby Meacham | | 7024 |
| 30416 | 7590 | 07/05/2005 | EXAMINER | |
| MEACHAM COMPANY 18560 PARKLAND DRIVE SHAKER HEIGHTS, OH 44122 | | | SPITZER, ROBERT H | |
| | | ART UNIT | | PAPER NUMBER |
| | | | | 1724 |

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-------------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/696,251 | MEACHAM |
| | Examiner Robert H. Spitzer | Art Unit 1724 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 October 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is indefinite because there is no direct antecedent basis for the recitations of "the barrier interior" and "the barrier surfaces". Claims 2-5 are indefinite because they recite "barrier surfaces" without any correlation to "the barrier surfaces" already recited in claim 1. Claim 6 is indefinite because there is no direct antecedent basis for the recitation of "said metallic content". Claim 7 is indefinite because there is no direct antecedent basis for the recitation of "the metal composition". Claim 9 is indefinite because there is no direct antecedent basis for the recitation of "the composition", and because when "such as" is being used, it is not known whether the broad "ceramic" or the more specific "alumina, zirconia or lanthanum chromite" is necessary to meet these claim limitations. Claim 10 is indefinite because there is no direct antecedent basis for the recitation of "the composition", and because when "such as" is being used, it is not known whether the broad "particles of oxide" or the more specific "copper oxide or nickel oxide" is necessary to meet these claim limitations. Claim 11 is indefinite for the same reasons as claim 10. Claim 12 is indefinite because there is no direct antecedent basis for the recitation of "the barrier material". Claim 15 is indefinite because there is no idrect antecedent basis for the recitation of "the composition". Claim 19 is indefinite because there is no direct

antecedent basis for the recitation of "the pore opening". Claims 8,13,14,16-18 and 20 are indefinite because they depend from the above indefinite claims.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7,12-15,19 and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by both the process of use and the membrane structure of Mercuri (2002/0094471).

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by both the process of use and membrane structure of Croset (2002/0155338).

6. The remaining references listed on the PTO-892 show art of interest.

7. Applicant's response to this Office action should also include the following editorial changes: page 3, line 20, "an coating" should be "a coating"; page 9, line 23, "and," should be inserted after ":"; page 10, line 3, the ":" should be a ":"; page 13, line 5, "gasses" should be "gases"; page 14, line 11, "be also be" should be "also be"; page 14, lines 19 and 20, "gasses" should be "gases"; page 15, line 4, "C" should be "B"; page 15, line 13, "the" should be deleted; and, page 15, line 17, "embodiment" should be "embodiments".

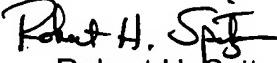
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Spitzer whose telephone number is (571)

272-1167. The examiner can normally be reached on Monday-Thursday from (5:30AM-4:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 29, 2005


Robert H. Spitzer
Primary Examiner
Art Unit 1724

